

REPLACEMENT CLAIMS

Cancel claims 4-6 and 15-17.

ORIGINAL

RECEIVED  
4-10-03

- A1  
B1
1. (Amended) A chip rate base band processor which receives digital information containing symbol information and provides a symbol output, comprising:
- an input memory which stores the digital information;
  - a data PN code buffer;
  - a pilot PN code buffer;
  - a pilot multiplier having a first input coupled to the pilot PN code buffer, a second input coupled to the input memory, and an output;
  - a data multiplier having a first input coupled to the data PN code buffer, a second input coupled to the input memory, and an output;
  - a pilot correlator having an input coupled to the output of the first multiplier, and an output;
  - a pilot memory coupled to the pilot correlator;
  - a channel estimator coupled to the pilot memory;
  - a peak detector coupled to the pilot memory;
  - a data correlator coupled to the data multiplier;
  - load controller having a first input coupled to the peak detector, a second input coupled to data correlator, and an output;
  - a data memory coupled to the load controller;
  - a phase rotator having a first input coupled to the channel estimator, a second input coupled to the data memory, and an output; and
  - a symbol combiner having an input coupled to the phase rotator, and an output which provides the symbol output.

- A2  
B2
7. (Amended) In a chip rate base band receiver processor which receives digital information containing symbol information, wherein each symbol of the symbol information is of a predetermined time duration, a method comprising the steps of:
- storing the digital information;
  - multiplying a PN code with a first segment, corresponding to a first multi-path and representative of the predetermined time duration, of the stored digital information and

multiplying the PN code with a second segment, corresponding to a second multi-path and representative of the predetermined time duration, of the stored digital information.

A2  
B2  
8. (Amended) In a chip rate base band receiver processor which receives digital information containing symbol information, wherein each symbol of the symbol information is of a predetermined time duration, a method comprising the steps of:

storing the digital information; and

successively multiplying a first PN code with a first plurality of segments of the stored digital information, wherein each segment corresponds to a different multi-path is representative of the predetermined time duration.